



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,105	11/23/2005	John Claude Husband	07812.0058-00	8404
22852 7590 09/24/2009 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413				
			EXAMINER PAK, HANNAH J	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 09/24/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,105

Applicant(s)

HUSBAND ET AL.

Examiner

Hannah Pak

Art Unit

1796

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-41, 43, 45, 47-50, 54, 56, 57, 68 and 79-110 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39-41, 43, 45, 47-50, 54, 56-57, 68, and 79-110 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing Review (PTO-849)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. All outstanding rejections, except for those maintained below, are withdrawn in light of applicants' amendment/remarks filed on 08/10/2009.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The applicants have amended claims 39 and 68 to include the phrase, "wherein said grinding is carried out in one or more stages, ending in a final grinding stage." The applicants have also amended claims 80, 103-104, and 110 to further limit the amount of solids in the inorganic particulate material to "up to about 35% by weight" from "up to about 50% by weight." Since the applied art of record (Brown et al) discloses these limitations within the meaning of 35 USC 103(a), the rejection of record over Brown et al is maintained and has been elaborated to explain how this comes about. Additionally, the amendment raises an issue under 35 USC 112, first paragraph and a rejection necessitated by amendment has therefore been made. Thus, the following action is properly made final.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 39, 68, 80, 103-104, and 110 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s)

contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The applicants have amended the claims to include the phrase, "wherein said grinding is carried out in one or more stages, ending in a final grinding stage," recited in claims 39, 68, and 110. This phrase fails to satisfy the written description requirement of 35 USC 112, first paragraph since there is no support for this phrase in the application as originally filed, *see MPEP § 2163*. While there is support for "the grinding may be carried out in one or more grinding stages" on page 7, lines 29-30, of the present specification, there is no support for the "ending in a final grinding stage." The applicants have also amended the claims to limit the level of solids to "up to 35% by weight" recited in claims 80, 103-104, and 110. While there is support for up to about 50% by weight on page 3, lines 20-24 of the present specification, there is no support for the new amount. Accordingly, these phrases are not reasonably conveyed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 39-40, 43, 45, 47-48, 54, 56, 57, 68, 80-81, 83-85, 88-90, 92, 98, and 103-110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US 6,087,404).

The rejection is adequately set forth in Pages 2-4 of Office action mailed on 04/13/2009 and is incorporated here by reference.

As to claims 39, 68, and 110, in step (B), Brown teaches grinding the formed suspension in the presence of the dispersing agent, which is the last grinding stage and prior to the step (C), where the material is already grounded. Brown also teaches addition of another dispersant agent in suspension of the already grounded material, corresponding to the claimed "at completion of the final grinding stage."

As to claims 80, 103-104, and 110, Brown et al. teach using at least 20% by weight of particulate inorganic material (Col. 2, lines 27-28 and Col. 3, lines 13-15), which also overlaps with those claimed (up to about 35% by weight).

6. Claims 49-50 and 86-87 rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US 6,087,404) as applied to claims 39-40, 43, 45, 47-48, 54, 56, 57, 68, 80-81, 83-85, 88-90, 92, 98, and 103-110 above, and further in view of Skuse et al. (US 6,315,867).

The rejection is adequately set forth in Pages 4-5 of Office action mailed on 04/13/2009 and is incorporated here by reference.

7. Claims 41, 82, 93-97 and 99-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US 6,087,404) as applied to claims 39-40, 43, 45, 47-48, 54, 56, 57, 68, 80-81, 83-85, 88-90, 92, 98, and 103-110 above, and further in view of Wesley (US 2002/0117085) and Admitted Prior Art (Pages 8-9 of the specification).

The rejection is adequately set forth in Pages 5-6 of Office action mailed on 04/13/2009 and is incorporated here by reference.

8. Claims 79 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US 6,087,404) as applied to claims 39-40, 43, 45, 47-48, 54, 56, 57, 68, 80-81, 83-85, 88-90, 92, 98, and 103-110 above, and further in view of Leighton et al. (US 4,915,845).

The rejection is adequately set forth in Page 6 of the Office action mailed on 04/13/2009 and is incorporated here by reference.

Response to Arguments

9. The applicants' arguments filed 08/10/2009 are fully considered but are not found persuasive. Specifically, the applicants argue that **(A)** Brown does not teach or suggest a sub-effective amount of at least one dispersant for the inorganic particulate material at completion of the final grinding stage (see Pages 16-18 of the Applicants' Remarks). Like Brown, the other references, Skuse, Wesley, Admitted Prior Art, and Leighton fail to teach or suggest at least grinding carried out in one or more stages, grinding in a final grinding stage (see Page 18 of the Applicants' Remarks). The applicants also argue

that **(B)** all the references cited fail to teach or suggest grinding an inorganic particulate material in an aqueous suspension comprising a sub-effective amount of a least one dispersant, wherein the inorganic particulate material at a solids level up to about 35% by weight, based on the total weight of the suspension (see Pages 18-21 of the Applicants' Remarks).

With respect to argument **(A)**, Brown teaches a process comprising (1) preparing an aqueous suspension containing particulate material in particulate form, (2) grinding the formed suspension in the presence of a polycarboxylate dispersing agent for the particulate material, and (3) adding further dispersing agent to the suspension of ground material (Col. 2, lines 27-35). As one can see from step 2, Brown teaches grinding the formed suspension in the presence of the dispersing agent, which is the last grinding stage and prior to the step 3, where the material is already grounded. Brown also teaches addition of another dispersant agent in suspension of the already grounded material. Moreover, the other references, i.e. Skuse, Wesley, and Leighton, do not disclose all the features of the present claimed invention, they are used as teaching references, and therefore, it is not necessary for these secondary references to contain all the features of the presently claimed invention. Rather, these references teach a certain concept, and in combination with the other references, disclose the presently claimed invention.

With respect to argument **(B)**, Brown et al. teach employing at least 0.05%-1.0% by weight of dispersants, based upon the weight of dry particulate inorganic material (Col. 8, lines 4-10), which is defined by the specification and the claims as "a sub-

effective amount" (up to about 0.05% by weight). The amount of dispersants taught by Brown et al. touches and overlaps with those claimed. Moreover, Brown et al. teach using at least 20% by weight of particulate inorganic material (Col. 2, lines 27-28 and Col. 3, lines 13-15), which also overlaps with those claimed (up to about 35% by weight). Thus, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the invention was made, since it has been held that choosing the overlapping portion, of the ranges taught by Brown et al. and the ranges claimed by the applicant, has been held to be a *prima facie* case of obviousness, see *MPEP* § 2144.05. Furthermore, the claims require a particulate material containing a particular level of solids. Brown's teachings meet that requirement. Even if Brown teaches using preferably at least 40% by weight, more preferably in the range of from 60-80% by weight, as the applicants point out, the term "preferably" does not limit Brown.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hannah Pak whose telephone number is (571) 270-5456. The examiner can normally be reached on Monday - alternating Fridays (7:30 am - 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hannah Pak
Examiner
Art Unit 1796

/HP/

Application/Control Number: 10/523,105

Page 9

Art Unit: 1796

/Vasu Jagannathan/

Supervisory Patent Examiner, Art Unit 1796